



# THE SOURCE



NEWSLETTER OF THE NHDES DRINKING WATER SOURCE PROTECTION PROGRAM  
ON THE WEB AT [WWW.DES.NH.GOV/DWSPP](http://WWW.DES.NH.GOV/DWSPP)

SUMMER 2008

## Addressing the Impacts of Lawn Irrigation

There are two certainties in July — fireworks and lawn irrigation. The Environmental Protection Agency (EPA) estimates that one-third of all residential water use is for landscape irrigation. New Hampshire's water use data shows that many water systems have a summer water demand that is twice the volume of winter demand, due in large part to lawn irrigation. This seasonal disparity continues to grow as many new residential developments include in-ground systems to irrigate water-thirsty, chemical dependent lawns that have insufficient soils to retain moisture and support turf.

In fact, discretionary use, such as lawn irrigation, is significant enough that many water systems must develop new sources in order to meet higher peak demands. Alternatively, some water systems resort to enact-

ing watering restrictions and bans during summer. The title of a recent American Water Works Association Journal article, "Are Water Managers Becoming Lawn Irrigation Managers?,"<sup>1</sup> succinctly summarizes the problem.

Increasing summer water demand comes when there is naturally less water available in the environment due to warmer temperatures and plant uptake. As we continue to use more water to irrigate lawns, less water is available to satisfy important environmental needs and other opportunities for beneficial use.

To assist municipalities, DES is developing a model ordinance for landscape water efficiency. The model ordinance may recommend limits to the amount of turf grass area in new developments, utilization of xeriscaping

principles, retention of mature trees and adequate loam, water conservation controls on in-ground irrigation systems, and limitations to when daily irrigation can occur. Similar ordinances have been enacted elsewhere, and the EPA WaterSense program has a draft water efficiency specification for new homes and landscapes that may be viewed at [http://www.epa.gov/watersense/pp/new\\_homes.htm](http://www.epa.gov/watersense/pp/new_homes.htm).

For more information about landscape water efficiently or water conservation, please contact Derek Bennett in the Drinking Water and Groundwater Bureau at (603) 271-6685.

### Footnote

<sup>1</sup> Vickers, Amy; *Are Water Managers Becoming Lawn Irrigation Managers?* American Water Works Journal, February, 2007

## Presentations from the 2008 Source Protection Workshop Available Online

Approximately 160 people attended this year's Source Water Protection Workshop held on May 19 at the New Hampshire Technical Institute in Concord. Each year DES offers this workshop to water supply managers, land use development officials, consultants, and non-profit organizations as an opportunity to learn and discuss the current science, policy and practice of source water protection. By all measures, this year's workshop was a success.

Speakers from across the state and New England presented session topics

that included how to improve public outreach, integrate low impact development techniques, and organize local land conservation. There were also sessions on the new federal and state Groundwater Rule and the state Alteration of Terrain and Shoreland Protection rules.

The workshop attracted a number of government agencies, water resources companies, and non-profits as exhibitors and the day's schedule offered time for people to network and

**Workshop**, continued on page 3

## September Training Opportunity for Incident Response

Training in the Water Sector National Incident Management System (NIMS) and Incident Command System (ICS) is being offered at the Ammonoosuc Water Treatment Plant in Berlin on September 10, 2008. NIMS is a consistent, nationwide template that enables all government and non-governmental organizations to work together during natural disasters and emergencies, including terrorism. NIMS requires all agencies to use ICS, a standardized, on-scene, all-hazard

**Training**, continued on page 4



## Spotlight on ... Ballam Farm Conservation Easement Partnerships That Work

by Josh Kelly, Field Representative, Trust for Public Land

Increasingly creative partnerships are required to conserve important land. By working together we can meet mutual conservation goals. One example of such a partnership is the protection of Ballam Farm in Walpole, where the Trust for Public Land (TPL) brought individuals, private organizations, and local, state, and federal government agencies together to conserve 60 acres of farm and forestland along the Connecticut River.

The Ballam Farm property, once part of Louis Ballam's family farm, was for sale in the spring of 2006 and the landowners were considering plans from a developer for a car dealership and residential development. This was a great concern to local residents as this land contains prime agricultural soils, active farm fields, and floodplain forest and overlays nearly 20 percent of the wellhead protection area contributing recharge to Walpole's "River Well," which is the largest public water supply in town, serving 922 residents and businesses.

TPL, after meeting with the leasing farmer, members of the Walpole Conservation Commission and Walpole Water Department agreed to try to protect the land. TPL was awarded grant money for this project from the USDA Natural Resources Conservation Service (NRCS), Farm and Ranch Lands Protection Program (federal funding source), the New Hampshire Department of Environmental Services, Water Supply Land Grant Program (state funding source) and Walpole's Conservation Commission. With nearly 75 percent of the necessary conservation funding guaranteed, TPL began a private fundraising campaign to complete the Ballam Farm project over the summer and fall of 2007. The campaign raised over \$182,000 from local residents through private donations to match public funds and complete the deal.

The Ballam Farm project would not have been possible were it not for this patchwork of local, state, federal, and private dollars and more specifically the successful marriage of farmland conservation with drinking water

source protection. Both NRCS and DES were willing to collaborate and remain flexible throughout the conservation easement negotiation process, resulting in an easement that allows agriculture and protects Walpole's municipal drinking water supply. Through this project, working land will remain working and at the same time help protect the wellhead and allow for the natural recharge of the town's most productive drinking water aquifer.

The Trust for Public Land undertook the project as part of its Connecticut River Program, which works in four states to conserve land that is both valued by local communities, and representative of the outstanding resource values of New England's largest watershed. Ballam Farm's prime agricultural soils, its proximity to the town's water supply and its riverfront location, made it a high conservation priority. Partnerships made working to protecting this land a success.

## \$191,000 in Grants Provided To Improve Local Drinking Water Source Protection

Several of the projects funded involve installing stormwater treatment systems to protect surface sources, installing fencing around drinking water supplies, developing town-wide source protection plans and implementing key strategies identified in a water system's existing Source Water Protection Plan.

DES's Local Source Water Protection Grant Program received 34 proposals requesting funds to improve local drinking water source protection during the 2008 grant cycle. Nearly

half (16) of the submitted grant proposals will be funded, providing over \$191,000 to improve local source protection.

The 2009 grant applications will be available this summer. Applications must be submitted to DES no later than November 3, 2008. To find out more about this grant program, contact Johnna McKenna at (603) 271-7017 or [johnna.mckenna@des.nh.gov](mailto:johnna.mckenna@des.nh.gov) or visit [www.des.nh.gov/dwspp/grants.htm](http://www.des.nh.gov/dwspp/grants.htm).

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## **OEP's Housing and Conservation Planning Program Enables Proactive Municipal Planning**

Population growth in New Hampshire may be inevitable, but sprawl, diminished water quality, and destruction of irreplaceable natural and historic resources are not. Many of New Hampshire's municipalities could use a little help to maintain their communities' natural and historic assets while providing for economic vitality and balanced housing stock.

The Housing and Conservation Planning Program (HCPP) is a new grant program designed to provide that help. HCPP is administered by the Office of Energy and Planning (OEP) and enables municipalities to purchase technical assistance to plan for housing and conservation through a unified approach. This program funds planning work that draws on a wide range of data, including housing and demographic statistics, as well as natural and historic inventories. Communities that are ready to address source water issues will find HCPP to be a valuable tool, as it allows for a holistic approach to land

use planning.

HCPP awards grants through four progressive grant stages:

Stage 1: Research, mapping, and data analysis — grants up to \$20,000.

Stage 2: Growth and development strategy planning — grants up to \$15,000.

Stage 3: Master plan updates — grants up to \$15,000.

Stage 4: Implementation into the regulatory framework — grants up to \$30,000.

Applications, guidance, and additional information are available online at [www.nh.gov/oep/programs/HCPP](http://www.nh.gov/oep/programs/HCPP) or by contacting Jennifer Czysz at [jennifer.czysz@nh.gov](mailto:jennifer.czysz@nh.gov) or Dari Sassan at [dari.sassan@nh.gov](mailto:dari.sassan@nh.gov) at OEP. Due to current state budgetary issues, funding levels are presently undetermined.

## **Shoreland Protection Changes July 1 A Snapshot of What You Need to Know**

On July 1, amendments to the Comprehensive Shoreland Protection Act (CSPA) took effect. The CSPA protects shoreland areas within 250 feet of "public waters," that is, rivers of a certain size (see [www.des.state.nh.us/cspa/fourth.htm](http://www.des.state.nh.us/cspa/fourth.htm) for a list), fresh water bodies that are 10 acres or more in size, and coastal waters. The CSPA changes include: creating a 50-foot "waterfront buffer," limiting impervious surfaces and land alteration within 150 feet of the shoreline, and requiring a DES shoreland permit for certain activities within 250 feet of the shoreline.

For more information, copies of permit applications, and DES rules that implement the CSPA changes, see [www.des.nh.gov/cspa](http://www.des.nh.gov/cspa) or call the DES Shoreland Program at (603) 271-2147.

**Water Resources Survey Coming This Summer!**  
**See page 4 for details.**

## **Source Water Protection Award Winner Announced**

DES's annual Source Water Protection Award recognizes a water system, municipality, organization, or person for exemplary efforts and results related to source water protection. This year's award was given to John (Jack) Munn, the senior land use planner with the Southern New Hampshire Regional Planning Commission. Jack has been the driving force behind the Commission's *Regional Source Water Protection Initiative* to improve source protection in the greater Manchester area. Over the

last year, he has been active in a number of local source protection projects in Hooksett, Deerfield, Candia, Chester and New Boston. Together with David Preece, SNHRPC's executive director, and Stephen Williams, Nashua Regional Planning Commission's executive director, Jack has had a prominent role in the Upper Merrimack Watershed Assessment Study and has made valuable contributions to several important state source water protection strategy and policy initiatives. Congratulations, Jack!

## **Workshop**, *continued from page 1*

discuss local protection issues with water resources professionals and DES staff.

The American Ground Water Trust sponsored this year's workshop and the United States Geological Survey (USGS) provided financial assistance. Our thanks to both of these organizations! If you missed this event, you can visit [www.des.nh.gov/dwssp/2008/index.htm](http://www.des.nh.gov/dwssp/2008/index.htm) to view the agenda and download speaker presentations. If you'd like to participate in planning next year's workshop, please contact Pierce Rigrod at (603) 271-0688 or [Pierce.Rigrod@des.nh.gov](mailto:Pierce.Rigrod@des.nh.gov).

## EPA Invests \$12 Million to Secure New York City's Drinking Water Supply

The U.S. Environmental Protection Agency recently announced that it is providing \$12 million to New York City to develop and evaluate a drinking water contamination warning system for the city's drinking water supply. EPA is taking proactive steps to protect the nation's drinking water supply through robust investments in water security. This pilot project, called the Water Security Initiative, will have broad application for the nation's drinking water utilities.

While specific details about the system can't be divulged for security rea-

sons, the contamination warning system to be installed and evaluated by New York City includes online water quality monitoring, public health surveillance, sampling and analysis, enhanced security monitoring and consumer complaint surveillance. In addition, the warning system is designed to be sustainable for long-term operation and to even improve water quality management.

To learn more about EPA's efforts in Water Security, visit: <http://cfpub.epa.gov/safewater/watersecurity/>.

### Water Resources Survey Info

Be on the lookout for a survey being coordinated this summer by the UNH Survey Center and Weston & Sampson Engineers. The purpose of the survey is to assist DES with the State Water Plan process.

DES needs to hear from you!

## Training, *continued from page 1*

incident management system, when responding to incidents. ICS establishes organizational and communication protocols that allow responders to effectively respond and communicate with one another by providing a common terminology.

Course materials have been adapted from the Federal Emergency Management Agency training materials to be more water sector specific and will include three group activities that simulate an incident response, e.g. flood, that allow the participants to apply what they have learned in a "real" emergency response situation.

Water utilities with an active role in water sector emergency response should attend this one-day workshop. It is important for water sector personnel to understand and have a working knowledge of ICS, as it is the national protocol for responding to any incident within the U.S.

Log on to [www.horsleywitten.com/ICStraining](http://www.horsleywitten.com/ICStraining) to view a detailed agenda and to register for the workshop. If you have any questions, please contact Johnna McKenna at (603) 271-7017 or [johnna.mckenna@des.nh.gov](mailto:johnna.mckenna@des.nh.gov).

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